

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1 - 8 (Canceled)

9. (New) A method comprising:

capturing wireless signals on a plurality of antennas;

forming a plurality of beams from outputs of the antennas;

selecting a subset of the beams for processing by a plurality of receivers,

wherein the subset includes the strongest beam;

outputting, from the receivers, processed signals corresponding to the beams;

and

extracting a message from the processed signals.

10. (New) The method of claim 9, wherein the extracting comprises:

assigning weights to the processed signals;

combining the weighted signals; and

generating therefrom an output signal.

11. (New) The method of claim 10, further comprising demodulating the output signal to obtain the message.

12. (New) The method of claim 9, wherein the strongest beam is processed by a primary transceiver of the plurality of receivers.

13. (New) The method of claim 10, wherein the other beams of the subset are processed by auxiliary receivers of the plurality of receivers.

14. (New) A method comprising:

- receiving wireless signals on a plurality of antennas;
- forming a plurality of beams from outputs of the antennas;
- applying exclusion logic to select a strongest beam and auxiliary beams;
- providing the strongest beam to a primary transceiver and the auxiliary beams to auxiliary receivers;
- processing the strongest beam in the primary receiver and the auxiliary beams in the auxiliary receivers; and
- extracting information encoded in the processed beams.

15. (New) The method of claim 14, wherein the extracting comprises providing the processed beams to a digital signal processor, weighting and combining the processed beams using the digital signal processor, and demodulating an output signal of the digital signal processor.

16. (New) The method of claim 15, wherein the digital signal processor is coupled to the exclusion logic and provides signals thereto to control the selecting.

17. (New) A system comprising:

- an N-element antenna array;
- a beam former coupled to the array;
- exclusion logic coupled to the beam former to select a subset of outputs of the beam former, wherein the subset includes the strongest beam;

a plurality of receivers coupled to the exclusion logic to process the selected subset; and

processing logic coupled to the plurality of receivers to extract information from the subset processed by the receivers.

18. (New) The system of claim 17, wherein the plurality of receivers includes a primary transceiver to process the strongest beam.

19. (New) The system of claim 17, wherein the plurality of receivers includes auxiliary receivers to process other beams of the subset.

20. (New) The system of claim 17, wherein the processing logic comprises a digital signal processor to assign weights to signals corresponding to the processed subset, and combine the weighted signals.

21. (New) The system of claim 20, wherein the processing logic further comprises a demodulator to extract a message from an output signal of the digital signal processor.

22. (New) The system of claim 17, wherein the processing logic is coupled to the exclusion logic and controls the selection of the subset.